

ABSTRACT

An apparatus for analyzing the broadband noise content of a digital image comprising the following: a means of automatically identifying regions of originally constant color in the image by analysis of the variance of pixel values of regions of the image; a means of automatically detecting and discarding regions deemed to be unrepresentative of the true noise content of an image, including under- and over- exposed regions; a means of allowing the user to manually select some or all required constant color regions if desired; and, a means of analyzing such constant color regions to generate a parametric or non-parametric model of the noise in the image, including frequency characteristic within and between channels and other characteristics such as phase which might describe structured noise.